OUT 1 8 2004 E

Substitute for form 1449A-B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

C	omplete if Known
Application Number	10/821,001
Filing Date	April 7, 2004
First Named Inventor	Peter Palese
Group Art Unit	1648 1636
Examiner Name	Unassigned McKelvey
Attorney Docket Number	26-003710US
Date Submitted	October 14, 2004

	U.S. Patent Do	ocument	Name of Patentee or Applicant of	Date of Publication of	Pages, Columns, lines,	
Cite No.	Number	Kind Code (if known)	Palese et al.	Cited Document MM-DD-YYYY	Where Relevant Passage or Relevant Figures Appe	
AA	6,544,785			04-08-2003		
AB	5,166,057		Palese et al.	11-24-1992		
AC	5,854,037		Palese et al.	12-29-1998		
AD	6,001,634		Palese et al.	12-14-1999		
	AA AB AC	AA 6,544,785 AB 5,166,057 AC 5,854,037	AA 6,544,785 AB 5,166,057 AC 5,854,037	No. (if known) AA 6,544,785 Palese et al. AB 5,166,057 Palese et al. AC 5,854,037 Palese et al.	No. (if known) MM-DD-YYYY AA 6,544,785 Palese et al. 04-08-2003 AB 5,166,057 Palese et al. 11-24-1992 AC 5,854,037 Palese et al. 12-29-1998	

			amina Batant Dani		N PATENT DOCUMEN			_
-	011-	FC	oreign Patent Docu			Date of Publication	Pages, Columns, Lines,	١.
Examiner Initials	Cite No.	Office	Number	Kind Code (if known)	Name of Patentee or Applicant of Cited Document	of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	L
			· · · · · · · · · · · · · · · · · · ·					T
			····					t
								╀
								╄
				, "				Г

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials	Cite No.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	ļ.
			
			\downarrow
			\dagger
			T

Examiner Signature	Mickely	Date Considered	1/17	105
	, , , ,		7	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



'a \								•		
and a					ATTY, DOCKET NO.		SERIAL NO. (0		,001	
	LIST	OF REFERENCES CITE	D BY APPL	ICANT	7682-048 26-0037-10	02				
		(Use several sheets if i			Palese, P. and Garcia-Sastre,	A.				
		(000 0000.0.00.00.00.00.00.00.00.00.00.00	.000000.,,		FRING DATE April 7, 2004 GROUP					
					September 14, 1999	: 1	1636 16	48		
			U.	S. PATENT DOCUM	MENTS	*****				
*EXAMINER INITIAL	<u> </u>	DOCUMENT NUMBER	DATE .		NAME	,aass	SUBCLASS	È APP	IG DATE ROPRIATE	
Dre	39	4,786,600	11/22/88	Kramer et al.						
	82	EP-A-O 7.02 085								
	83	EP-A-0 780 475						•		
_	.84	WO-A-9 712 032	 							
	102	WO 97/06270	ļ			-				
\/	106	WO 98/13501				1	<u> </u>	т—		
		·	<u> </u>			<u> </u>				
	,		FORI	EIGN PATENT DOC	UMENTS	,			·	
	ł	DOCUMENT NUMBER	DATE		COUNTRY	CLASS	SUBCLASS	TRAN	SLATION	
								YES	NO	
		1		L					<u> </u>	
		OTHER RE	FERENCES (I	ncluding Author, Title	e, Date, Pertinent Pages, Etc.)					
me	1	Emerson and Yu, 1975, "Both NS and L Proteins Are Required for In Vitro RNA Synthesis by Vesicular Stomatitis Virus", J. Virol. 15: 1348-1356								
	2	Naito and Ishihama, 19 Biol. Chem. <u>251</u> : 4307-		n and Structure o	f RNA Polymerase from Ve	sicular S	Stomatitis '	Virus'	', J.	
	3	Hay et al., 1977, "Trans	cription of th	e Influenza Virus	us Genome", Virol. <u>83</u> : 337-355					
	4	Racaniello et al., 1981, 214: 916-919	"Cloned Poli	ovirus Compleme	entary DNA Is Infectious in	Mamma	lian Cells"	, Scie	ence	
	5	Lamb and Choppin, 198	33, "The Gen	e Structure and f	Replication of Influenza Viru	ıs", Ann	. Rev. Bio	chem	<u>52</u> :	
	6	Krug, Transcription and and Kingsbury, D.W. No			ses. In: Genetics of Influer	ıza Viru:	ses, Ed., F	alese	e, P.	
		•			In Vitro Show Altered Amin	oacylati	on and Re	plicas	e :	
-	7	Template Activities", Nature 311: 171-175								
	7a		Dreher et al., 1988, "Mutational Analysis of the Sequence and Structural Requirements in Brome Mosaic Virus RNA for Minus Strand Promoter Activity", J. Mol. Biol. 201: 31-40							
	8	Kaplan et al., 1985, "In 8	Vitro Synthes	sis of Infectious P	Poliovirus RNA*, Proc. Natl.	Acad. S	ci. USA. <u>8</u>	<u>32</u> : 84	24-	
			cation and E	nzymatic Propert	ies of an RNA Polymerase	RNA C	omplex fro	m		
1/1	9	Influenza Virus", Virus F		•	· · · · · · · · · · · · · · · · · · ·		·		······································	
V	10	-	·		s of Vesicular Stomatitis Vi	rus L an	d NS Prot	eins i	n the	
1		Transcription Process In	n Vitro", Bioc	<u>nem. Biophys. Re</u>	es. Commun. 126: 40-49					

	,	
me	11	Beaton and Krug, 1986, "Transcription Antitermination During Influenza Viral Template RNA Synthesis Requires the Nucleocapsid Protein and the Absence of a 5' Capped End", Proc. Natl. Acad. Sci. USA. 83: 6282-6286
	12	Levis et al., 1986, "Deletion Mapping of Sindbis Virus DI RNAs Derived from cDNAs Defines the Sequences Essential for Replication and Packaging", Cell 44: 137-145
	13	Takeuchi et al., 1987, "In Vitro Synthesis of Influenza Viral RNA: Characterization of an Isolated Nuclear System That Supports Transcription of Influenza Viral RNA", J. Biochem. 101: 837-845
	14	Hsu et al., 1987, Genomic RNAs of Influenza Viruses Are Held in a Circular Conformation In Virions and In Infected Cells by a Terminal Panhandle", Proc. Natl. Acad. Sci. USA. 84: 8140-8144
	15	Honda et al., "Identification of the RNA Polymerase-Binding Site on Genome RNA of Influenza Virus", J. Biochem. 102: 1241-1249
	16	Ward et al., 1988, "Direct Measurement of the Poliovirus RNA Polymerase Error Frequency In Vitro", J. Virol. <u>62</u> : 558-562
	17	Mirakhur and Peluso, 1988, "In Vitro Assembly of a Functional Nucleocapsid from the Negative-Stranded Genome RNA of a Defective Interfering Particle of Vesicular Stomatitis Virus", Proc. Natl. Acad. Sci. USA. 85: 7511-7515
	18	Ishihama and Nagata, 1988, Viral RNA Polymerases", CRC Crlt. Rev. Biochem. 23: 27-76
	19	Shapiro and Krug, 1988, "Influenza Virus RNA Replication In Vitro: Synthesis of Viral Template RNAs and Virion RNAs in the Absence of an Added Primer", J. Virol. 62: 2285-2290
·	20	Honda et al., 1988, "RNA Polymerase of Influenza Virus: Role of NP in RNA Chain Elongation", J. Biochem. 104: 1021-1026
	21	Szewczyk et al., 1988, "Modification, Thioredoxin Renaturation, and Reconstituted Activity of the Three Subunits of the Influenza A Virus RNA Polymerase", Proc. Natl. Acad. Sci. USA 85: 7907-7911
	22	Palese, 1977, "The Genes of Influenza Virus", Cell, 10: 1-10
	23	Bishop et al., 1971, "Transcription of the Influenza Ribonucleic Acid Genome by a Virion Polymerase", J. Virol. 8: 66-73
	24	Bouloy et al., 1980, "Both the 7-methyl and the 2'-O-methyl Groups in the Cap of mRNA Strongly Influence its Ability to Act as Primer for Influenza Virus RNA Transcription", Proc. Natl. Acad. Sci. USA. 77: 3952-3956
	25	Ulmanen et al., 1983, "Influenza Virus Temperature-Sensitive Cap (m ⁷ GpppNm)-Dependent Endonuclease", J. Virol. 45: 27-35
	26	Beaton and Krug, 1984, "Synthesis of the Templates for Influenza Virion RNA Replication In Vitro", Proc. Natl. Acad. Sci. USA. 81: 4682-4686
	27	Kawakami et al., 1981, "RNA Polymerase of Influenza Virus. II. Influence of Oligonucleotide Chain Length on the Priming Activity of RNA Synthesis", J. Biochem. 89: 1759-1768
	28	Kawakami and Ishihama, 1983, "RNA Polymerase of Influenza Virus. III. Isolation of RNA Polymerase-RNA Complexes from Influenza Virus PR8", J. Biochem. 93: 989-996
	29	Detjen et al., 1987, "The Three Influenza Virus Polymerase (P) Proteins Not Associated with Viral Nucleocapsids in the Infected Cell Are in the Form of a Complex", J. Virol. 61: 16-22
	30	St. Angelo et al., 1987, "Two of the Three Influenza Viral Polymerase Proteins Expressed by Using Baculovirus Vectors Form a Complex in Insect Cells", J. Virol. 61: 361-365
	31	Khan et al., 1987, "Synthetic Templates and the RNA Polymerase of Influenza A Virus", Nucleosides & Nucleosides 6: 543-554

Truc	32	Krystal et al., 1986, "Expression of the Three Influenza Virus Polymerase Proteins in a Single Cell Allows Growth Complementation of Viral Mutants", Proc. Natl. Acad. Sci. USA. 83: 2709-2713
	33	Li et al., 1989, "Complementation and Analysis of an NP Mutant of Influenza Virus", Virus Research, 12: 97-
	34	Kingsbury, et al., 1987, "Assembly of Influenza Ribonucleoprotein In Vitro Using Recombinant Nucleoprotein", Virol. 156: 396-403
	35	Rochovansky, 1976, RNA Synthesis by Ribonucleoprotein-Polymerase Complexes Isolated from Influenza Virus*, Virol. 73: 327-338
	36	Robertson et al., 1981, "Polyadenylation Sites for Influenza Virus mRNA", J. Virol. 38: 157-163
	37	Schreirer et al., 1988, "Functional and Structural Analysis of the Ribonucleoprotein Complexes of Different Human Influenza Virus Strains", Acta. Virol. 32: 289-295
	38	Xiong et al., 1989, "Sindbis Virus: An Efficient, Broad Host Range Vector for Gene Expression in Animal Cells", Science, 243: 1188-1191
	40	Parvin et al., 1989, "Promoter Analysis of Influenza Virus RNA Polymerase", J. Virol. 63: 5142-5152
	41	Luytjes et al., 1989, "Amplification, Expression, and Packaging of a Foreign Gene by Influenza Virus", Cell 59: 1107-1113
	42	Enami et al., 1990, "Introduction of Site-Specific Mutations Into The Genome of Influenza Virus", Proc. Natl. Acad. Sci. 87: 3802-3805
	43	Ballart et al., 1990, "Infectious Measles Virus from Cloned cDNA", EMBO J. 9: 379-384; and its retraction at 8th International Conference on Negative Strand Viruses, 1991, Abstr. 43
	44	Huang et al., 1990, "Determination of Influenza Virus Proteins Required for Genome Replication", J. Virol. 64: 5669-5673
	45	Ballart, 1991, "Functional and Nonfunctional Measles Virus Matrix Genes from Lethal Human Brain Infections", J. Virol. 65: 3161-3166; and its retraction attached
	46	Enami & Palese, 1991, "High-Efficiency Formation of Influenza Virus Transfectants", J. Virol. 65(5): 2711-2713
	47	Muster et al., 1991, "An Influenza A Virus Containing Influenza B Virus 5' and 3' Noncoding Regions on the Neuraminidase Gene is Attenuated in Mice", Proc. Natl. Acad. Sci. USA 88: 5177-5181
	48	Enami et al., 1991, "An Influenza Virus Containing Nine Different RNA Segments", Virol. 185: 291-298
	49	Park et al., 1991, "Rescue of a Foreign Gene by Sendai Virus", Proc. Natl. Acad. Sci. USA 88: 5537-5541
	50	Collins et al., 1991, "Rescue of Synthetic Analogs of Respiratory Syncytial Virus Genomic RNA and Effect of Truncations and Mutations on the Expression of a Foreign Reporter Gene", Proc. Natl. Acad. Sci. USA <u>88</u> : 5537-5541
	51	Macejak, D.G. and Sarnow, P., 1991, "Internal Initiation of Translation Mediated by the 5' Leader of a Cellular mRNA", Nature 353: 90-94
	52	Levis, R. et al., 1987, "Engineered Defective Interfering RNAs of Sindbis Virus Express Bacterial Chloramphenicol Acetyltransferase in Avian Cells", Proc. Natl. Acad. Sci. USA. 84: 4811-4815
	53	Chanda, P.K. et al., 1983, "In Vitro Transcription of Defective Interfering Particles of Influenza Virus Produces Polyadenylic Acid-Containing Complementary RNAs", J. Virol. 45: 55-61
V	54	Fields, S. et al., 1982, "Nucleotide Sequences of Influenza Virus Segments 1 and 3 Reveal Mosaic Structure of a Small Viral RNA Segment", Cell 28: 303-313

My	55	Pelletier, J. et al., 1988, "Internal Initiation of Translation of Eukaryotic mRNA Directed by a Sequence Derived from Poliovirus RNA", Nature 334: 320-325
56		Hiti, A.L. and Nayak, D.P., 1982, "Complete Nucleotide Sequence of the Neuraminidase Gene of Human Influenza Virus A/WSN/33", J. Virol. 41: 730-734
	57	Young et al., 1983, "Efficient Expression of Influenza Virus NS1 Nonstructural Proteins in Escherichia coli", Proc. Natl. Acad. Sci. USA. 80: 6105-6109
	58	Greenspan et al., 1985, "Expression of Influenza Virus NS2 Nonstructural Protein in Bacteria and Localization of NS2 in Infected Eucaryotic Cells", J. Virol. <u>54</u> : 833-843
	59	Lamb et al., 1984, "Expression of Unspliced NS1 mRNA, Spliced NS2 mRNA, and a Spliced Chimera mRNA from Cloned Influenza Virus NS1 DNA in an SV40 Vector", Virology 135: 139-147
	60	Kaverin et al., 1975, "A Quantitative Estimation of Poxvirus Genome Fraction Transcribed as 'Early' and 'Late' mRNA", Virology 65: 112-119
	61	Cooper et al., 1979, "In vitro Translation of Immediate Early, Early, and Late Classes of RNA from Vaccinia Virus-Infected Cells", Virology 96:368-380
	62	Piccone, M.E. et al., 1993, "Mutational Analysis of the Influenza Virus vRNA Promoter", Virus Res. 28: 99-
	63	Jang, S.K. et al., 1989, "Initiation of Protein Synthesis by Internal Entry of Ribosomes into the 5' Nontranslated Region of Encephalomyocarditis Virus RNA in vivo", J. Virol. 63: 1651-1660
·	64	Jang, S.K. et al., 1988, "A Segment of the 5' Nontranslated Region of Encephalomyocarditis Virus RNA Directs Internal Entry of Ribosomes during in vitro Translation", J. Virol. 62: 2636-2643
	65	Adam, M.A. et al., 1991, "Internal Initiation of Translation in Retroviral Vectors Carrying Picornavirus 5' Nontranslated Regions", J. Virol. 65: 4985-4990
	66	Alexander, L. et al., 1994, "Polioviruses Containing Picornavirus Type 1 and/or Type 2 Internal Ribosomal Entry Site Elements: Genetic Hybrids and the Expression of a Foreign Gene", Proc. Natl. Acad. Sci. USA. 91: 1406-1410
	67	Molla, A. et al., 1992, "Cardioviral Internal Ribosomal Entry Site Is Functional in a Genetically Engineered Dicistronic Poliovirus", Nature 356: 255-257
	68	Tsukiyama-Kohara, K. et al., 1992, "Internal Ribosome Entry Site Within Hepatitis C Virus RNA", J. Virol. 6
	69	Both, G.W. et al., 1992, "Relocation of Antigens to the Cell Surface Membrane Can Enhance Immune Stimulation and Protection", Immunol. and Cell Biol. 70: 73-78
	70	Naim, H.Y. and Roth, M.G., 1993, "Basis for Selective Incorporation of Glycoproteins into the Influenza Virus Envelope", J. Virol. <u>67</u> : 4831-4841
	71	Javaherian, K. et al., 1990, Science 250:1590-1593
	72	LaRosa, G.J. et al., 1990, Science 249:932-945
	73	Li, S. et al., 1992, J. Virol. 66:399-404
 	74	Takahashi, H. et al., 1992, Science 255:333-336
1	75	Taylor, P.M. et al., 1987, Immunogenetics 26:267-272
	76	Peabody and Berg 1986, "Termination-reinitiation occurs in the translation of mammalian cell mRNAs," MocCell Biol. 6, 2695-2703
V	77	Peabody et al., 1986, "Effect of upstream reading frames on translation efficiency in simian virus 40 recombinants," Mol. Cell Biol. 6, 2704-2711

TM	~	78	Schnell et al., 1994, "Infectious rabies virus from cloned cDNA," EMBO J. 13, 4195-4203
\ 	U	<u>'</u> *	Lawson et al., 1995, "Recombinant vesicular stomatitis viruses from DNA," Proc. Natl. Acad. Sci., USA 92,
		79	4477-4481
			Whelan et al., 1995, "Efficient recovery of infectious stomatitis virus entirely from cDNA clones." Proc. Natl
		80	Acad. Sci. USA 92, 8388-8392
		81	Ackerman and Berthiaume, 1995, "Atlas of virus diagrams," CRC Press, Boca Raton, 3-5, 7-8, 50-62
		85	Calain and Roux, 1993, J. Virol. 67, 4822-4830
		86	Fields et al., 1996, Virology, 3 rd ed., 1313-1351
		87	Yu et al, 1995, J. Virol. 69, 2412-2419
		88	Radecke et al., 1995, EMBO J. 14:5773-5784 ("Radecke")
		89	Kato et al., 1996, Genes to Cells 1:569-570 ("Kato")
		90	Elliott et al., 1990, J. Gen Virology 71:1413-1426 ("Elliott")
		91	Boyer et al., 1994, Virology 198:415-426 ("Boyer")
		92	De & Banerjee, 1994, Ind. J. Biochem & Biophys. 31:367-376 ("De & Banerjee")
		93	Conzelmann, 1996, J. Gen Viro 77:381-389 ("Conzelmann")
		94	Durbin et al., 1997, Virology 235:323-332 ("Durbin")
			Elliott & Bridgen, 1997, Tenth International Conference on Negative-Strand Viruses, Dublin, Ireland.
\perp		95	Abstract No. 96 ("Elliott")
\perp		96	Subbarao et al., 1995, J. Virol. 69:5969-5977
		97	Castrucci et al., 1995, J. Virol. 69: 2725-2728
\perp		98	Collins et al., 1995, Proc. Natl. Acad. Sci. USA 92:11563-11567
		99	Conzelmann, 1998, Annu. Rev. Genet. 32, 123-162
		100	Moyer et al., 1991, J. of Virol. 65, 2170-2178
		101	Roberts et al., 1998, Virology 247, 1-6
		103	Lamb et al. 1996, Fundamental Virology, chapter 21, third edition, Lippincott-Raven Publishers, Philadelphi
		104	Blumberg et al., Function of Paramyxovirus 3' and 5' End-Sequences; In Theory and Practice
		105	Lamb et al., 1996, Fundamental Virology, chapter 20, third edition, Lippincott-Raven Publishers, Philadelph
		107	Sidhu et al., 1995, Virology 208, 800-807
		108	Rose, 1996, Proc. Natl. Acad. Sci. USA 94, 14998-15000
		109	Conzelmann and Schnell, 1994, J. Virol., 68, 713-719
T		110	Hausmann et al., 1996, RNA 2, 1033-1045
		111	Kolakofsky et al., 1998, J. Virol. 72, 891-899
T		112	Opposition to European Patent No. 0490972 filed on behalf of American Cyanamid Company
T		113	Patentee's Response to Notice of Opposition, dated March 14, 1997
		114	Opponent's Observations, dated October 17, 1997
		115	Patentee's Response to Opponent's Observations
1		116	Desselberger's Declaration
		117	Jin's Declaration
7		118	Opponent's submissions, dated April 29, 1999
ヿ	7	119	Conzelmann Declaration, dated March 29, 1999

Sheel 16 No Service

the	120	Rose Declaration, dated April 12, 1999
	121	Udem Declaration, dated April 13, 1999
	122	Billeter Declaration, dated April 20, 1999
	123	Interlocutory Decision in Opposition Proceedings of Eurpoean Patent No. 0490972
	124	Patentee's Grounds for Appeal, submitted July 2001
	125	Radecke et al., 1997, Medical Virology 49-63
	126	Dimock et al., 1993, J. Virol. 67:2772-2778
	127	Collins et al. 1993, Virology 195:252-256
	128	Leyrer et al. 1998 J. Virol. Methods 75:47-58
V	129	Negai 1999, Reviews in Medical Virology 9:83-99

EXAMINER Mc Kelver	DATE CONSIDERED 9/	17	105	<u> </u>
	· 1/		<i>t</i> ———	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

ATTY, DOCKET NO.	SERIAL NO. 10/821, 001
2682048 26.003710US	09/396,339
APPLICANT	
Pologo P. and Carola Sastro A	

LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary) **U.S. PATENT DOCUMENTS** DATE CLASS SUBCLASS FILING DATE *EXAMINER INITIAL DOCUMENT NUMBER 11/22/88 Kramer et al. 4.786,600 **FOREIGN PATENT DOCUMENTS** DOCUMENT NUMBER SUBCLASS TRANSLATION YES NO OTHER REFERENCES (Including Author, Title, Date, Pertinent Pages, Etc.) Emerson and Yu, 1975, "Both NS and L Proteins Are Required for In Vitro RNA Synthesis by Yesicular Stomatitis Virus*, J. Virol. <u>15</u>: 1348-1356 Naito and Ishihama, 1976, "Function and Structure of RNA Polymerase from Vesicular Stomatitis Virus", J. Biol. Chem. 251: 4307-4314 Hay et al., 1977, "Transcription of the Influenza Virus Genome", Virol. 83: 387-355 3 Racaniello et al., 1981, "Cloned Poliovirus Complementary DNA Is Infactious in Mammalian C 4 214: 916-919 Lamb and Choppin, 1983, "The Gene Structure and Replication of Influenza Virus", Ann. Rev. Biochem 52: 5 Krug, Transcription and Replication of Influenza Viruses. In: Genetics of Influenza Viruses, Ed., Palese, P. and Kingsbury, D.W. New York, Springer-Verlag, 1983, p. 70-98 Dreher et al., 1984, "Mutant Viral RNAs Synthesized In Vitro Show Altered Aminoacylation and Replicase Template Activities", Nature 311: 171-175 Dreher et al., 1988, "Mutational Analysis of the Sequence and Structural Requirements in Brome Mosaic Virus RNA for Minus Strand Prometer Activity", J. Mol. Biol. 201: 31-40 Kaplan et al., 1985, "In Vitro Synthesis of Infectious Poliovirus RNA", Proc. Natl. Acad. Sci. USA. 82: 8424-8428 Kato et al., 1985, "Purification and Enzymatic Properties of an RNA Polymerase-RNA Complex from Influenza Virus", Virus Research 3: 115-127 De and Banerjee, 1985, "Requirements and Functions of Vesicular Stomatitis Virus L and NS Proteins in the 10 Transcription Process In Vitro", Biochem. Biophys. Res. Commun. 126: 40-49 Beaton and Krug, 1986, "Transcription Antitermination During Influenza Viral Template RNA Synthesis Requires the Nucleocapsid Protein and the Absence of a 5' Capped End", Proc. Natl. Acad. Sci. USA. 83: 6282-6286 Levis et al., 1986, "Deletion Mapping of Sindbis Virus DI RNAs Derived from cDNAs Defines the Sequences Essential for Replication and Packaging", Cell 44: 137-145 Takeuchi et al., 1987, "In Vitro Synthesis of Influenza Viral RNA: Characterization of an Isolated Nuclear System That Supports Transcription of Influenza Viral RNA", J. Biochem. 101: 837-845



- -		
	14	Hsu et al., 1987, Genomic RNAs of Influenza Viruses Are Held in a Circular Conformation In Virions and Influenced Cells by a Terminal Panhandle*, Proc. Natl. Acad. Sci. USA. 84: 8140-8144
	15	Honda et al., "Identification of the RNA Polymerase-Binding Site on Genome RNA of Influenza Vinas", J. Biochem. 102: 1241-1249
	16	Ward et al., 1988, "Direct Measurement of the Poliovirus RNA Polymerase Error Frequency in Vitro", J. Virol. 62: 558-562
	17	Mirakhur and Peluso, 1988, "In Vitro Assembly of a Functional Nucleocapsid from the Negative-Stranded Genome RNA of a Defective Interfering Particle of Vesicular Stomatitis Virus", Proc. Natl. Acad. Sci. USA. 85: 7511-7515
	18	Ishihama and Nagata, 1988, Viral RNA Polymerases", CRC Crlt. Rev. Biochem. 23: 27-76
	19	Shapiro and Krug, 1988, "Influenza Virus RNA Replication In Vitro: Synthesis of Viral Template RNAs and Virion RNAs in the Absence of an Added Primer", J. Virol. 62: 2285-2290
	20	Honda et al., 1988, "RNA Polymerase of Influenza Virus: Role of NP in RNA Chain Elongation", J. Biochem. 104: 1021-1026
	21	Szewczyk et al., 1988, "Modification, Thioredoxin Renaturation, and Reconstituted Activity of the Three Subunits of the Influenza A Virus RNA Polymerase", Proc. Natl. Acad. Sci. USA 85: 7907-7911
	22.	Palese, 1977, "The Genes of Influenza Virus", Cell, 10: 1-10
	23	Bishop et al., 1971, "Transcription of the Influenza Ribonucleic Acid Genome by approximate Polymerase", J. Virol. 8: 66-73
	24	Bouloy et al., 1980, "Both the 7-methyl and the 2" Ø-methyl Groups in the Cap of mRNA Strongly Influence its Ability to Act as Primer for Influenza Virus RNA Transcription", Proc. Natl. Acad. Sci. USA. 77: 3952-3956
	25	Ulmanen et al., 1983, "Influenza Virus Temperature-Sensitive Cap (m ⁷ GpppNm)-Dependent Endonuclease", J. Virol. <u>45</u> : 27-35
	26	Beaton and Krug, 1984, "Synthesis of the Templates for Influenza Virion RNA Replication In Vitro", Proc. Natl. Acad. Sci. USA. 81: 4682/4686
	27	Kawakami et al., 1981, "RNA Polymerase of Influenza Virus. II. Influence of Oligonucleotide Chain Length on the Priming Activity of RNA Synthesis", J. Biochem. 89: 1759-1768
	28	Kawakami and Ishihama, 1983, "RNA Polymerase of Influenza Virus. III. Isolation of RNA Polymerase-RNA Complexes from Influenza Virus PR8", J. Biochem. 93: 989-996
	29	Detjen et al., 1987, "The Three Influenza Virus Polymerase (P) Proteins Not Associated with Viral Nucleocapsids in the Infected Cell Are in the Form of a Complex", J. Virol. 61: 16-22
•	30	St. Angelo et al., 1987, "Two of the Three Influenza Viral Polymerase Proteins Expressed by Using Baculovirus Vectors Form a Complex in Insect Cells", J. Virol. 61: 361-365
	31	Khan et al., 1987, "Synthetic Templates and the RNA Polymerase of Influenza A Virus", Nucleosides & Nucleosides 6: 543-554
	32	Krystal et al., 1986, "Expression of the Three Influenza Virus Polymerase Proteins in a Single Cell Allows Growth Complementation of Viral Mutants", Proc. Natl. Acad. Sci. USA. 83: 2709-2713
	33	Li et al., 1989, "Complementation and Analysis of an NP Mutant of Influenza Virus", Virus Research, 12: 97-
	34	Kingsbury, et al., 1987, "Assembly of Influenza Ribonucleoprotein In Vitro Using Recombinant Nucleoprotein", Virol. 156: 396-403

35	Rochovansky, 1976, RNA Synthesis by Ribonucleoprotein-Polymerase Complexes Isolated from Influenze Virus", Virol. 73: 327-338	
36	Robertson et al., 1981, "Polyadenylation Sites for Influenza Virus mRNA", J. Virol. 38: 157-163	
37	Schreirer et al., 1988, "Functional and Structural Analysis of the Ribonucleoprotein Complexes of Differen: Human Influenza Virus Strains", Acta. Virol. 32: 289-295	
38	Xiong et al., 1989, "Sindbis Virus: An Efficient, Broad Host Range Vector for Gene Expression in Animal Cells", Science, 243: 1188-1191	
 40	Parvin et al., 1989, "Promoter Analysis of Influenza Virus RNA Polymerase", J. Vivol. 63: 5142-5152	
41	Luytjes et al., 1989, "Amplification, Expression, and Packaging of a Foreign Gene by Influenza Virus", Cell 59: 1107-1113	
42	Enami et al., 1990, "Introduction of Site-Specific Mutations Into The Genome of Influenza Virus", Proc. Natl. Acad. Sci. 87: 3802-3805	
 43	Ballart et al., 1990, "Infectious Measles Virus from Cloned cDNA", EMBO J. 9: 379-384; and its retraction at 8th International Conference on Negative Strand Viruses, 1991, Abstr. 43	
44	Huang et al., 1990, "Determination of Influenza Virus Proteins Required for Genome Replication", J. Virol 64: 5669-5673	
45	Ballart, 1991, "Functional and Nonfunctional Measles Vilus Westry Genes from Lethal Human Brain Infections", J. Virol. 65: 3161-3166; and its retraction attached	
46	Enami & Palese, 1991, "High-Efficiency Formation of Influenza Virus Transfectants", J. Virol. 65(5): 2711- 2713	
47	Muster et al., 1991, "An Influenza A Virus Containing Influenza B Virus 5' and 3' Noncoding Regions on the Neuraminidase Gene is Attenuated in Mige", Proc. Natl. Acad. Sci. USA 88: 5177-5181	
48	Enami et al., 1991, "An Influenza Virus Containing Nine Different RNA Segments", Virol. 185: 291-298	
 49	Park et al., 1991, "Rescue of a Foreign Gene by Sendai Virus", Proc. Natl. Acad. Sci. USA 88: 5537-5541	
50	Collins et al., 1991, "Rescue of Synthetic Analogs of Respiratory Syncytial Virus Genomic RNA and Effect of Truncations and Mutations on the Expression of a Foreign Reporter Gene", Proc. Natl. Acad. Sci. USA 88: 5537-5541	
51	Macejak, D.G. and Sarnow, P., 1991, "Internal Initiation of Translation Mediated by the 5' Leader of a Cellular mRNA", Nature 353: 90-94	
52	Levis, R. et al., 1987, "Engineered Defective Interfering RNAs of Sindbis Virus Express Bacterial Chloramphenicol Acetyltransferase in Avian Cells", Proc. Natl. Acad. Sci. USA. 84: 4811-4815	
53	Chanda, P.K. et al., 1983, "In Vitro Transcription of Defective Interfering Particles of Influenza Virus Produces Polyadenylic Acid-Containing Complementary RNAs", J. Virol. 45: 55-61	
 54	Fields, S. et al., 1982, "Nucleotide Sequences of Influenza Virus Segments 1 and 3 Reveal Mosaic Structure of a Small Viral RNA Segment", Cell 28: 303-313	
55	Pelletier, J. et al., 1988, "Internal Initiation of Translation of Eukaryotic mRNA Directed by a Sequence Derived from Poliovirus RNA", Nature 334: 320-325	
56/	Hiti, A.L. and Nayak, D.P., 1982, "Complete Nucleotide Sequence of the Neuraminidase Gene of Human Influenza Virus A/WSN/33", J. Virol. 41: 730-734	
57	Young et al., 1983, "Efficient Expression of Influenza Virus NS1 Nonstructural Proteins in <i>Escherichia coli</i> ". Proc. Natl. Acad. Sci. USA. 80: 6105-6109	

•		
	58	Greenspan et al., 1985, "Expression of Influenza Virus NS2 Nonstructural Protein in Bacteria and Localization of NS2 in Infected Eucaryotic Cells", J. Virol. 54: 833-843
	59	Lamb et al., 1984, "Expression of Unspliced NS1 mRNA, Spliced NS2 mRNA, and a Spliced Chimera mRNA from Cloned Influenza Virus NS1 DNA in an SV40 Vector", Virology 135: 139-147
	60	Kaverin et al., 1975, "A Quantitative Estimation of Poxvirus Genome Fraction Transcribed as 'Early' and 'Late' mRNA", Virology 65: 112-119
	61	Cooper et al., 1979, "In vitro Translation of Immediate Early, Early, and Late Classes of RNA from Vaccinia Virus-Infected Cells", Virology 96:368-380
	62	Piccone, M.E. et al., 1993, "Mutational Analysis of the Influenza Virus vRNA Promoter", Virus Res. 28: 99-
	63	Jang, S.K. et al., 1989, "Initiation of Protein Synthesis by Internal Entry of Ribosomes into the 5' Nontranslated Region of Encephalomyocarditis Virus RNA in vivo", J. Virol. 63: 1651-1660
	64	Jang, S.K. et al., 1988, "A Segment of the 5' Nontranslated Region of Encephalomyogarchis Virus RNA Directs Internal Entry of Ribosomes during in vitro Translation", J. Vi(ol. 82: 2666-2643
	65 .	Adam, M.A. et al., 1991, "Internal Initiation of Translation in Retroviral Vectors Carrying Picornavirus 5' Nontranslated Regions", J. Virol. 65: 4985-4990
	66	Alexander, L. et al., 1994, "Polioviruses Containing Picornavirus Type 1 and/or Type 2 Internal Ribosomal Entry Site Elements: Genetic Hybrids and the Expression of a Foreign Gene", Proc. Natl. Acad. Sci. USA. 91: 1406-1410
	67	Molla, A. et al., 1992, " Cardioviral Internal Ribosomal Entry Site Is Functional in a Genetically Engineered Dicistronic Poliovirus", Nature 356: 255-257
	- 68	Tsukiyama-Kohara, K et al., 1992, "Internal Ribosome Entry Site Within Hepatitis C Virus RNA", J. Virol. <u>66</u> : 1476-1483
	69	Both, G.W. et al., 1992, "Relocation of Antigens to the Cell Surface Membrane Can Enhance Immune Stimulation and Protection", Immunol. and Cell Biol. 70: 73-78
	70	Naim, H.Y. and Roth, M.G., 1993, "Basis for Selective Incorporation of Glycoproteins into the Influenza Virus Envelope", J. Virol. <u>67</u> : 4831-4841
	71	Jevaherian, K. et al., 1990, Science 250:1590-1593
	72/	/ LaRosa, G.J. et al., 1990, Science 249:932-945
	/13	Li, S. et al., 1992, J. Virol. 66:399-404
	74	Takahashi, H. et al., 1992, Science 255:333-336
	75	Taylor, P.M. et al., 1987, Immunogenetics 26:267-272
EXAMINER DATE CONSIDERED 9/17/05		
*EXAMINER in conform	: Initial ance ar	if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not and not considered. Include copy of this form with next communication to applicant.

NY2 - 1180718.1